

SOKUDO

Photolithography Coat/Develop Track

Joint Development Programs (JDP)

SOKUDO continues to make achievements in next-generation lithography (NGL) technology development in immersion processing, double-patterning and Extreme Ultraviolet (EUV) lithography through close partnerships with photolithography exposure companies, materials suppliers, semiconductor manufacturers either in direct collaboration projects or in conjunction with industry consortia.



Immersion scanner & SOKUDO RF3S
with integrated metrology
(Photo Courtesy of IMEC)

Immersion Lithography Technical Papers

SPIE
Advanced Lithography

Paper presentation, Monday, February 23, 5:30pm - 5:50pm

7273-12 : **Photoresist stabilization for double-patterning using 172-nm photoresist curing**
Advanced Micro Devices; SOKUDO; Rohm & Haas Electronic Materials; Advanced Micro Devices

Poster presentation, Monday, February 23, 5:30pm - 8:00pm

7272-128 : **Track optimization and control for 32-nm node double patterning and beyond**
IMEC; SOKUDO

7273-60 : **Improved CD uniformity for shrink-assisted patterning**
SOKUDO

7273-71 : **Post-develop blob defect reduction**
SOKUDO; JSR Micro

7273-75 : **Analysis of the effect of point-of-use filtration on microbridging defectivity**
Entegris; IMEC; SOKUDO

7273-107 : **Performance of an ArF siloxane BARC exposed to a 172-nm UV cure for double patterning applications**
Honeywell Electronic Materials; Advanced Micro Devices; SOKUDO; Applied Materials

7273-126 : **CD and defect improvement challenges for immersion processes**
Toshiba; SOKUDO

7273-135 : **Backside EBR process performance with various wafer properties**
SOKUDO

7273-138 : **Defectivity process optimization on immersion topcoat less resist stacks**
SOKUDO; ASML

SOKUDO Technical Papers in Immersion Lithography 2008

- **SPIE Advanced Lithography**
 - 6924-190 : Demonstration of Production Readiness of an Immersion Lithography Cell
 - 6922-158 : Immersion Lithography Bevel Solutions
 - 6922-109 : Film Stacking Architecture for Immersion Lithography Process
- **SPIE Lithography Asia**
 - 7140-74 : Cluster optimization to improve total CD control as an enabler for double patterning
- **Int'l Symposium on Immersion Lithography Extensions**
 - P-RE-02 : Assessment of In-situ Bevel Cleaning to Improve Edge Defectivity on Product Wafers